

410 IAC 1-2.5-95 Diphtheria; specific control measures

Authority: IC 16-19-3-4; IC 16-41-2-1

Affected: IC 16-41-2; IC 16-41-9

Sec. 95. The specific control measures for diphtheria (infectious agent: *Corynebacterium diphtheriae*) are as follows:

- (1) An investigation by a department field representative, in cooperation with the local health officer, shall:
 - (A) be performed immediately; and
 - (B) include case management of diphtheria.

The investigation shall include, at a minimum, determination of immunization status of the index case or suspect case. Culture shall be obtained for organism identification. A complete list of contacts shall be generated. Contacts are defined as all individuals in the household, all individuals with a history of habitual, close contact, and all individuals directly exposed to throat and nasal secretions of the patient.

- (2) For hospitalized patients, institute droplet precautions for pharyngeal diphtheria and contact precautions for cutaneous diphtheria. Continue precautions until:

- (A) the patient is off antibiotics; and
- (B) two (2) cultures taken twenty-four (24) hours apart are negative.

- (3) Concurrent disinfection is required for the following:

- (A) Articles in contact with the patient.
- (B) All articles soiled by the patient's discharges.

Terminal cleaning is required.

- (4) Contacts who are:

- (A) food employees;
- (B) employees of schools, preschools, or daycare facilities; or
- (C) health care workers;

shall be excluded from work until bacteriologic examination proves them not to be carriers.

- (5) All contacts, regardless of immunization status, shall be:

- (A) kept under surveillance for seven (7) days for signs and symptoms of disease;
- (B) cultured for *C. diphtheriae*; and
- (C) treated prophylactically with:

- (i) a single intramuscular (IM) dose of benzathine penicillin G (six hundred thousand (600,000) units (U) for those children weighing less than thirty (30) kg and one million two hundred thousand (1,200,000) U for those children weighing thirty (30) kg or more and adults); or
- (ii) a ten (10) day course of oral erythromycin (forty (40) milligrams per kilogram per day (mg/kg/day maximum of two (2) grams per day).

For individuals who are culture positive, repeat cultures after completion of therapy.

Previously immunized contacts should receive a booster dose of diphtheria toxoid if more than five (5) years have lapsed since the last immunization. Individuals incompletely immunized or with unknown immunization status should start an active immunization series with a diphtheria toxoid preparation appropriate for age and medical history.

- (6) Treatment of individuals suspected of having diphtheria should not be delayed while awaiting culture results. Diphtheria antitoxin should be given based on clinical diagnosis. Antitoxin dosage is dependent on length and

severity of the disease. Antimicrobial therapy is essential to eliminate the organism and to prevent the spread of the disease. One (1) of the following antimicrobial therapies should be given:

- (A) Procaine penicillin G (IM) (twenty-five thousand (25,000) to fifty thousand (50,000) U/kg/day for children and one million two hundred thousand (1,200,000) U/kg/day for adults in two (2) divided doses) for a recommended treatment period of fourteen (14) days.
- (B) Parenteral erythromycin (forty (40) to fifty (50) mg/kg/day, maximum two (2) grams per day (gm/d)) has been recommended until the patient can swallow comfortably, at which point oral erythromycin in four (4) divided doses or oral penicillin V (one hundred twenty-five (125) to two hundred fifty (250) mg four (4) times daily) may be substituted for a recommended total treatment period of fourteen (14) days.

- (7) The Centers for Disease Control and Prevention and the Council of State and Territorial Epidemiologists set the standard clinical and laboratory case definition.

(Indiana State Department of Health; 410 IAC 1-2.5-95; effective Dec 25, 2015)